FUEL-CELL INSTALLATION, METHOD FOR ACTIVATING AND DEACTIVIATING SAID INSTALLATION

Abstract of the Disclosure

The invention relates to a fuel-cell installation comprising: a reformer stage, which can be heated by a gas burner in order to carry out the water-vapour reformation of hydrocarbon and water-vapour into hydrogen and additional reformer products; at least one conversion stage, which is connected downstream of the reformer stage for the chemical preparation of the reformer products; and at least one fuel-cell stack, which is connected downstream of the conversion stage and comprises a plurality of anodes and cathodes with corresponding supply and discharge connections for converting the hydrogen into water to generate an electric current and heat. The fuel-cell stack is configured as a high-temperature fuel-cell stack with an operating temperature between about 100°C and about 200°C, the conversion stage is connected on the output side, without heat exchange, to the supply connection of the anode of the fuel-cell stack and the discharge connection of the anode of the fuel-cell stack is connected to an air supply connection on the gas burner. During the activation and/or deactivation of the fuel-cell installation, the air that has flowed through the reformer stage and the conversion stage can be selectively supplied to the anode of the fuel-cell stack.